

## ABSTRACT OF THE DISCLOSURE

As for a method for measuring a steering angle of a steering shaft for a vehicle, a first rotatable body that rotates together with the steering shaft at an  $r1$  ratio, and a second rotatable body that rotates together with the steering shaft at an  $r2$  ratio are used.

- 5 An absolute rotational angle of the first rotatable body,  $\Psi$ , can be expressed as  $\Psi' + i\Omega$ , and an absolute rotational angle of the second rotatable body,  $\theta$ , can be expressed as  $\theta' + i\Omega$ .  $\Psi'$  and  $\theta'$  are measured by means of an angle sensor whose measurement range is  $\Omega$ . To obtain the steering angle  $\Phi$  of the steering shaft, measurement values  $\Psi_M'$  and for  $\theta_M'$  of  $\Psi'$  and  $\theta'$  are obtained, and from a relation between  $\Psi'$  and  $\theta'$ , a plurality of
- 10  $\theta'$ s corresponding to the  $\Psi_M'$  value is calculated to yield a  $\theta_C'$ . By comparing the  $\theta_M'$  to the  $\theta_C'$ , an  $i$ -value of the first rotatable body is obtained. The obtained  $i$ -value is then used for obtaining an absolute rotational angle  $\Psi$  of the first rotatable body. Finally, from a relation between  $\Psi$  and  $\theta$ , the steering angle  $\Phi$  of the steering shaft is obtained.